



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/553,835

10/20/2005

Ruggiero Mattiello

B43-015

6308

28156 7590 06/26/2007  
COLEMAN SUDOL SAPONE, P.C.  
714 COLORADO AVENUE  
BRIDGE PORT, CT 06605-1601

EXAMINER

MAHONE, KRISTIE ANNETTE

ART UNIT

PAPER NUMBER

3751

MAIL DATE

DELIVERY MODE

06/26/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/553,835

Applicant(s)

MATTIELLO, RUGGERO

Examiner

Kristie A. Mahone

Art Unit

3751

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10 April 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) 1,7,8 and 10 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2,6-9 and 11-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on 20 October 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 2,3,4, 9,13,14 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Gandini (5,044,018).

With respect to independent claim 15, the Gandini reference discloses an aspirating apparatus for toilets comprising an aspirating means (13) with an inlet (11) and an outlet (17). [See Fig 1; Col 2, lines 32-38]. As shown, Gandini's outlet (17) leads outside of the toilet room; i.e. via outlet 20. [Col. 2, lines 48-55] The aspirator inlet (11) is operationally connected to a pair of aspirating ducts (10,) provided in the walls of a toilet bowl (9) [Fig. 2; Col.2; line 16-20 ]. The ducts lead to a cavity defined by the interior of the bowl (as at 2). The aspirating ducts include aspirating openings (100) near to a deposition area of urine to allow the aspiration of foul odors from the interior of the bowl. [Fig. 4; Col 1. lines 30-34]. As schematically shown in Figure 3, the aspirating ducts (10) are provided in walls of the bowl and connected to a back portion of a ring duct (110) for providing water to the cavity of the bowl. The aspirating openings (100)

are provided along a curved portion of the bowl, communicating with the cavity and turning towards an outfall area (as at 3). [Col. 2; lines 8-15]

Regarding claim 2, as shown, Gandini's system includes two aspirating ducts (10, including openings 100) departing from the back wall of the bowl (as at 9). The aspirating ducts are connected to the aspirating means (13) via piping 11. [See Figs 1-2]. Regarding the limitation in lines 5-6, the area beneath the top of the basin (16) is deemed a "side wall" of the bowl; i.e. defines the sides of the bowl. Since ducts 10 are integrated into the bowl proximate to the outfall area (3), they deemed to extend along the sidewall of the bowl as claimed. As shown in Figure 3, the aspirating openings (100) are located a final portion of the ducts. [See Fig. 3].

Regarding claim 3, Gandini's valve 18, located downstream of aspirator (13), is capable of preventing backflow of water.

Regarding claim 4, Gandini's aspirator outlet (17) may be conveyed to the bowl sewer conduit (3) of the toilet bowl, which is downstream of toilet bowl siphon (proximate 111) [Fig. 1]. Further, Gandini's system comprises a flow interception means between sewer conduit 3 and the outlet pipe of flush box (7); i.e. valve 18.

Regarding claim 9, Gandini's flow interception means comprises a motor drive valve (18) positioned down stream of aspirator (13) capable providing bi-directional flow blockage. [See Fig 1; p. 4, lines 62-68].

Regarding claim 13, as explained above Gandini's valve 18 is capable of preventing backflow.

Regarding claim 14, as shown in Figure 1, Gandini's aspirator (13) is connected to a bowl exhalation valve (21);i.e. via piping (17).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gandini (as discussed above) in view of Salvagno (WO 01/86080 ). The Gandini reference does not disclose a valve upstream of the aspirator. However, Salvagno teaches another aspirating apparatus wherein the flow interception means includes valve 23, located upstream of the aspirator, which is held in an open position when the aspirator is activated. [Figure 1] Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention made to have modified Gandini with a valve upstream of the aspirator, as taught by Salvagno, to allow and control air flow into the aspirator.

5. Claim 6 is rejected under 35 U.S.C 103 (a) as being unpatentable over Gandini, as modified by Salvagno, (as discussed above) in view of Pearson (4,007,498). Gandini as modified by Salvagno shows electronically controlled aspirating apparatus having all of the features claimed except a "flow gauge" operationally connected with

the aspirator. However, Pearson teaches another aspirating apparatus which is equipped with an automatic control (27) for terminating the aspirator (22) when moisture is present in a conduit coupled with the aspirator. [See Figs 1-2; Abstract]. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to have modified Gandini as modified by Salvagno, with an automatic aspirator control, as taught by Pearson, to prevent damage to the aspirator by moisture in the air stream.

6. Claim 7 is rejected under 35 U.S.C 103 (a) as being unpatentable over Gandini, as modified by Salvagno and Pearson (as discussed above) in view of Applicant's admitted prior art [Disclosure page 5, lines 21-23-page 6 ,line 1]. The modified Gandini reference shows the claimed invention, except for a vibrator. However, Applicant has admitted that the claimed vibrator (and claimed valve) are of known type. Therefore, it would have been obvious for a person of ordinary skill in the art at the time the invention was made to have modified Gandini as modified by Salvagno and Pearson with the known vibrator, to dislodge the valve float when it becomes trapped in the valve seat.

7. Claims 11-12, as presently understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Gandini (as discussed above) in view of Stone (2003/0163863). Gandini discloses an electrically operated aspirating apparatus having all the features claimed except a presence sensor using a photocell, and a time switch. However, the Stone reference teaches another toilet ventilation system having light recognition activation switch (76) using photocells which is responsive to the presence

of a user. [Para 0029]. Further, Stone's switch may be connected to a timing switch for the purpose of deactivating the aspirator after a predetermined time. [Figs 1-3; Para. 0027]. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to have modified Gandini with a photocell presence sensor and timer, as taught by Stone, to enable the user to activate the system without touching the toilet and facilitate automatic deactivation of the system after a predetermined time thereby conserving energy.

### ***Response to Amendment***

8. Applicant's cancellation of claims 7,8, and 10 moots all rejections thereto, as well as the objections to the Drawings raised at page 1 of the previous Action. However, Applicant's amendments to the pending claims are insufficient to overcome the prior art, or the rejections discussed supra.

### ***Response to Argument***

9. Applicant's arguments, see pages 8-9, filed March 26, 2007 , with respect to the rejection of claim 6 under 35 U.S.C. 112 have been fully considered, and are persuasive. The rejection is therefore withdrawn.

Applicant's arguments with respect to the Gandini reference have been fully considered, but they are not persuasive. Applicant asserts that Gandini does not teach aspirating openings which are "near a deposition area." (Remarks at p. 11). Examiner can not agree because Gandini shows aspirating openings (100), which are indeed near a

Art Unit: 3751

deposition area (as at 2) of the bowl cavity. (See Figure 3). To be sure, the entire interior surface would be a "deposition area" inasmuch as it is potential contact surface for deposited bodily fluids. Applicant further asserts that Gandini does not teach aspirating ducts "connected to ends of a back portion of a ring duct." (Remarks at p. 12) As shown in Figure 3, Gandini's aspirating ducts (10) are clearly "connected" to the back portion of the ring duct (110).

### ***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Limuix (4,993,083) is cited to show a ventilating apparatus wherein the air duct and ring duct for supply flush water to the bowl are in fluid communication.

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Art Unit: 3751

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kristie A. Mahone whose telephone number is (571) 272-3680. The examiner can normally be reached on Monday -Friday 8:30A.M-5 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Huson can be reached on (571)272-4887. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



**KHOA D. HUYNH  
PRIMARY EXAMINER  
TECHNOLOGY CENTER 3700**



**Kristie A Mahone  
Examiner  
Art Unit 3751**